

Case study

Science and Innovation Centre

Development of a science innovation and research centre (SIRC), sustainable energy park and medicinal cannabis cultivation facility at Coil Road in Braddan on the Isle of Man.

With a mix of cannabis cultivation space and research/development the scheme will also feature a solar farm to power the site which would be the Island's only grid-scale renewable project, contributing to the Isle of Man Government's ambitions on climate change.

Plans for the £100m complex on the Isle of Man to grow and export medicinal cannabis have been described as "game-changing" by Peel NRE the firm who are behind the scheme.

Alan Wood & Partners (AWP) provided civil and structural design services to the project. The challenge to the AWP team was to provide a number of linked development plateaus on this site which was steeply sloping and had a significant change in levels across it, that coordinated with the existing road infrastructure surrounding the site. Whilst at the same time seeking to minimise the removal of materials from the site and the requirements for substantial retaining structures hence meeting the project goals in terms of commercial viability and sustainability. In addition, this needed to work with both the Architect and Landscape Architects aspirations with regards to the proposed massing of the development.



Location:
Isle of Man



Client:
Peel NRE



Architect:
Garry Stewart
Design Associates
(GDSA)



Value:
Circa £100m



Civil
Engineering

Structural
Engineering

Engineer/
Manage/
Deliver/

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Peel NRE outlined proposals to build indoor cultivation facilities alongside a new research campus on land near Cooil Road in Braddan, Isle of Man. AWP were appointed by Peel to provide Civil & Structural services on the project. Initial feasibility commenced with AWP being involved in both the feasibility and as a key contributor to the planning application. With the site having significant changes in level, it was vital to ensure the scheme worked in terms of the proposed development plateaus and linking to the existing road infrastructure. In conjunction with the Architect we initially created 3-D earthworks proposals in Civils 3-D to ensure the plateau strategy worked effectively whilst at the same time minimising the need for removal of materials off-site and hence positively contributing to the overall sustainability of the project. The successful earthworks modelling of the development plateaus for the project then fed into the drainage modelling for the site and assisted in developing the drainage impact assessment for inclusion within the Planning application.

With regards to the structural building elements AWP have assisted in developing the concept design for the project which included the construction of atmospherically controlled buildings to develop high potency cannabis products for the pharmaceutical market and research/development facilities laboratories. In addition, the need for "comprehensive security measures" to protect the cultivation units led to some interesting discussions with security specialist with regards to this element of the works in terms of both buildings and surrounding infrastructure

It is anticipated that the development will bring specific education and employment opportunities to the Isle of Man in a "high-tech, scientific research" area.



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